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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/553,214.	10/13/2005	Masanao Kamei	4710-0122PUS1	8978
	7590 01/29/2008 ART KOLASCH & BIRCH		EXAMINER	
PO BOX 747			SOROUSH, ALI	
FALLS CHUR	CH, VA 22040-0747		ART UNIT PAPER NUM	
			1616	
			NOTIFICATION DATE	DELIVERY MODE
			01/29/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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\	Application No.	Applicant(s)				
•	10/553,214	KAMEI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ali Soroush	1616				
The MAILING DATE of this communication app	1	correspondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was really received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 14 No.	ovember 2007.					
24/23						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims		•				
4) Claim(s) <u>1-3,5-8 and 29</u> is/are pending in the a	application.					
4a) Of the above claim(s) is/are withdraw						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-3,5-8 and 29</u> is/are rejected.						
7) Claim(s) is/are objected to.	r election requirement					
8) Claim(s) are subject to restriction and/o	election requirement.					
Application Papers						
9) The specification is objected to by the Examine						
10) The drawing(s) filed on is/are: a) □ acc						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	tion is required if the drawing(s) is of vaminer. Note the attached Office	e Action or form PTO-152.				
11) The path of declaration is objected to by the Ex	carriller. Note the attached office					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority document		tion No				
2. ☐ Certified copies of the priority document3. ☒ Copies of the certified copies of the priority						
application from the International Burea						
* See the attached detailed Office action for a list		ed.				
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A						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D					
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	6) Other:					

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DETAILED ACTION

Acknowledgement of Receipt

Applicant's response filed on 11/14/2007 to the Office Action mailed on 08/14/2007 is acknowledged.

Status of the Claims

Claims 4 and 9-28 have been cancelled, 1-3 and 5-8 have been amended, and claim 29 has been newly added. Therefore, claims 1-3, 5-8 and 29 are currently pending examination for patentability.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejection of claims 1-4 and 9, 11-24 under 35 U.S.C. 102(b) as being anticipated by Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) **is withdrawn** in light of the amendment filed with aforementioned response.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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- 1. Applicant Claims
- 2. Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue;
 and resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 1. The rejection of claims 5, 27, and 28 under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) is withdrawn in light of the amendment filed with aforementioned response.
- 2. The rejection of Claims 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) further in view of Nishizawa et al. (US Patent Application 2006/0123564 A1, Published 06/15/2006, Filed 11/27/2003) **is withdrawn** in light of the amendment filed with aforementioned response.
- 3. The rejection of claims 6 under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) further in view of Nishizawa et al. (US Patent Application 2006/0123564 A1, Published 06/15/2006, Filed 11/27/2003) further in view of Nakazatoa et al. (US Patent 6290942 B1, Published 09/18/2001) **is withdrawn** in light of the amendment filed with aforementioned response.

New Grounds of Rejection

4. Claims 1-3, 5-8 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2,

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Published 03/01/2001) in view of Nishizawa et al. (US Patent Application 2006/0123564, Published 07/16/2006, Filed 11/27/2003).

Applicant Claims

Applicant claims a composition comprising an organopolysiloxane and an aminomodified silicones. Applicant further claims a method of conditioning hair by applying the composition to the hair.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Tetsuo et al. teaches, "Cosmetic material containing powders treated with silicones, with silicones being represented by the following formula (1):

$$R_{a}^{1} R_{b}^{2} R_{c}^{3} SiO_{(4-a-b-c)/2} (1)$$

wherein the R¹ groups, which are the same or different, each represent an organic group selected from the class consisting of alkyl groups containing 1 to 30 carbon atoms, aryl groups, aralkyl groups, fluorinated alkyl groups and organic groups represented by the following formula (2); R² groups each represent a reactive substituent selected from the class consisting of a hydrogen atom, hydroxyl group and alkoxyl groups containing 1 to 6 carbons atoms, which is attached to a silicon atom in the siloxane chain directly or via a linkage group comprising at least one carbon, oxygen or silicon atom; R³ groups each represent a silicone compound residue represented by the following formula (3); a is a number of from 1.0 to 2.5; b is a number of from 0.001 to 1.5; and c is a number of from 0.001 to 1.5

$$-C_dH_{2d}$$
-O-($C_2H_4O)_e$ ($C_3H_6O)_f$ R^4 (2)

$$-C_xH_{2x}-(SiO)_y(R^1)(R^1)-SiR^1_3(3)$$

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wherein R⁴ is a hydrocarbon group containing 4 to 30 carbon atoms or an organic group represented by R⁵-(CO)-; R⁵ is a hydrocarbon group containing 1 to 30 carbon atoms; d is an integer of from 0 to 15, e is an integer of from 0 to 50, and f is an integer of from 0 to 50; and x is an integer of from 1 to 5, and y is an integer of from 0 to 500." (See abstract). The cosmetic material can come if any of the forms including liquid, emulsion, solid, paste, gel and spray forms. (See page 9, Lines 9-10). "When the present silicone compounds represented by formula (1) are used as a powder surfacetreating agent, the weight average molecular weight suitable therefor, though it has no particular limits, is from 300 to 100, 000." (See page 4, Lines 30-31). In a specific example a compound organosiloxane is formed for use in a cosmetic composition that has an $R^{***} = C_3H_6O(C_3H_6O)_3C_{18}H_{35}$ (see example 4), $R^{**} = C_2H_4(CH_3)_2SiO(SiO)_7(CH_3)$ $(CH_3)Si(CH_3)_3$, $R^* = C_2H_4Si(OEt)_3$ (See example 1). (See page 10, paragraph 0077 and page 11, formula 12). "A surface treated powder, having the surface treated by using silicones according" to the description in the abstract. (See page 23, claim 2). "A cosmetic material in which powders are mixed, at least one of said powders being a surface-treated powder according to any of claims 2 to 7. (See page 23, claim 8). "A cosmetic according to claim 8, further containing uncutuous agents as a constituent." (See page 23, claim 9). "A cosmetic material according to claim 9, wherein at least a part of the uncutuous agents are fats and oils in a liquid state at room temperature." (See page 23, claim 10). "A cosmetic according to claims 9, 10, 11, wherein at least one of the uncutuous agents is an oil having fluorine-containing groups or amino groups." (See page 23, claim 12). Additional unctuous agents that can be used in the cosmetic

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material includes cylcosiloxane solutions of silicone rubber. (See page 6, paragraph 39). "A cosmetic material according to any of claims 8 to 17, further containing water as a constituent." (See page 23, claim 18). "A cosmetic material according to any of claims 8 to 18, further containing as a constituent a compound having an alcoholic hydroxyl group in its molecular structure." (See page 23 and 24, claim 19). "A cosmetic material according to claim 19, wherein the compound having an alcoholic hydroxyl group in its molecular structure is a water-soluble polymer." (See page 24, claim 21). A cosmetic material according to any of claims 8 to 21, further containing cross-linked organopolysiloxanes as a constituent." (See page 24, claim 22). "A cosmetic material according to claim 22, wherein the cross-linked organopolysiloxanes are cross-linked organopolysiloxanes which cause swelling when they contain a silicone having low viscosities of from 0.65 to 10.0 mm²/sec at 25°C in a quantity larger than their self weight." (See page 24, claim 23). "A cosmetic material according to claims 22 or 23, wherein the cross-linked organosiloxanes having cross-linked structure formed by the reaction between the hydrogen atoms bonded directly to silicon atoms and a crosslinking agent having at least two vinylic reactive moieties per molecule." (See page 24, claim 24). "A cosmetic material according to any of claims 8 to 25, further containing silicone resin as a constituent." (See page 24, claim 26). "A cosmetic according to claim 26, wherein the silicone resin is a silicone compound having a network structure." (See page 24, claim 29). "A cosmetic material according claim 29, wherein silicone compound having a network structure is netted silicone compound containing at least one moiety selected from the group consisting of pyrrolidone, long-chain alkyl,

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polyoxyalkylene, fluroalkyl and amino moieties." (See page 24, claim 30). "A cosmetic according to claim 26, wherein the silicone resin is an acrylsilicone resin." (See page 24, claim 27). "A cosmetic according to claim 27, wherein the acrylsilicone resin is an acrysilicone containing at least one moiety selected from the group consisting of pyrrolidone, long-chain alkyl, polyoxyalkylene, fluoroalkyl and amino moieties." (See page 24, claims 28). "A cosmetic material according to any of claims 22 to 24, wherein the cross-linked organopolysiloxanes are organopolysiloxanes having their cross-links at least one kind of moiety selected from the family consisting of polyoxyalkylene, alkyl, alkyenyl, aryl anf fluoroakyl moieties." (See page 24, claim 25). "A cosmetic material according to claims 8 to 12, further containing a surfactant constituent." (See page 23, claim 13). "A cosmetic according to claim 13, wherein the surfactant is modified silicone having polyoxyalkylene chains." (See page 23, claim 14). A cosmetic material according to claims 8 to 15, further containing another powder, a coloring material or a mixture thereof." (See page 23, claim 16). "A cosmetic material according to claim 16, wherein at least a part of the powder, the coloring material or the mixture thereof is a silicone resin powder, a powder having a silicone elastomer as its skeleton, an organic powder containing constitutional repeating units represented by -[O-Si]_n- or a mixture of two or more thereof." (See page 23, claim 17). In example 12 a liquid emulsion composition is described comprising diemthylpolysiloxane, methylphenylpolysiloxane, organopolysiloxane modified with polyoxyalkylene and alky groups, purified water, etc. (See page 17, paragraph 0117). In example 16 a cream composition is describe comprising decamethylcyclopentasiloxane (cyclic siloxane), dimethylpolysiloxane,

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polyether-modified silicone, purified water, etc. (See page 20, paragraph 0129). "The term 'cosmetic material' as used herein are intended to include skin care ... and hairdressing products, such as shampoo, rinse and treatment." (See page 9, Lines 6-9). It is the examiner position that water is a component that is "suitable for application to hair" and therefore meets the limitation of "at least one additional ingredient suitable for application to hair".

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Tetsuo does not exemplify hair treatment applications. Tetsuo also teaches that such compositions can in addition to having use as skin cosmetics can also be used in hairdressing applications such as shampoo.

Tetsuo lacks a teaching of a method wherein the organopolysiloxane hair treatment composition is applied after a composition comprising an amino-modified silicone. The teaching of Nishizawa et al. cures this deficiency.

Nishizawa et al. teaches a composition containing amino-modified silicone, highly polymerized silicone, a cationic polymer, and an oxidizing agent. (See abstract). Amino-

$$A \xrightarrow{S_{iO}} \begin{array}{c} R_{0} \\ S_{iO} \\ R_{0} \end{array} \begin{array}{c} R_{0} \\ S_{iO} \\ R_{0} \end{array} \begin{array}{c} R_{0} \\ R_{0} \\ R_{0} \end{array}$$

(NHCH₂CH₂)nNH₂ wherein R₀

modified silicones represented by

represents a hydroxyl group, a hydrogen atom or R , R represents a substituted or unsubstitued monovalent hydrocarbon group having from 1 to 20 carbon atoms, A

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represents R, a group –R'-(NHCH₂CH₂)_nNH₂, a group OR or hydroxyl group, R' represents a divalent hydrocarbon group from 1 to 8 carbon atoms, n stands for 0 to 3, and p and q are numbers, the sum of which is, in average, 10 or greater but less than 1000, preferably 30 or greater but less than 1000, more preferably 40 or greater but less than 800. (See paragraph 0009). "The hair bleaching or dyeing with the hair bleach or dye composition of the present invention may be performed, for example, by ... applying the mixture to the hair ... allowing it to stand for 1 to 60 minutes ... for the composition to act on the hair, washing the hair and then drying hair. In this case, removal of the hair bleach or dye composition with water by light wash, shampooing of the hair with a shampoo containing an anionic surfactant and subsequent washing with water to allow the cationic polymer to be moderately washed away and the silicone to moderately remain on the hair, which ultimately allow good conditioning effects to appear." (See paragraph 0047).

Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have also been obvious to one of ordinary skill in the art at the time of the instant invention to use the composition taught by Tetsuo et al. in hairdressing applications such as shampoo. One would have been motivated to do so because if one wanted a composition to be applied to the hair which has excellent storage stability in an emulsified condition (See page 2, paragraph 0009) one would have used the composition taught by Tetsuo et al. It would have been obvious to one of ordinary skill in the art to combine the teachings of Tetsuo with Nishizawa et al. One would have been

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motivated to do so because Nishizawa et al. teaches that after the application of the bleaching and dyeing composition the hair should be washed with a shampoo. For the foregoing reasons the instant invention would have been obvious to one of ordinary skill in the art at the time of the instant invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number For the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush Patent Examiner Art Unit: 1616

> Johann R. Richter Supervisory Patent Examiner Technology Center 1600